Murchison Minerals Ltd. Defines Highly Prospective Borehole Geophysical Anomaly at its Newly Acquired Betty Target, Intersecting 9.22% Zn Eq

written by Raj Shah | April 14, 2021

April 13, 2021 (Source) – Murchison Minerals Ltd. ("Murchison" or the "Company") (TSXV:MUR) is pleased to announce it has located a large, highly prospective, off-hole borehole geophysical anomaly at its newly acquired Betty Zone target located approximately one kilometre northeast of the Brabant-McKenzie Deposit (Figure 1 & 2). Two holes, BZ21-001 and BZ21-002, were recently drilled during the 2021 winter drill program at the Betty Zone and were later surveyed by a borehole electromagnetic (EM) survey at the end of the 2021 winter drill program. The resulting data indicates that the holes narrowly missed a large conductive body located immediately down dip and is approximately 100 to 300 metres below surface (Figure 4 & 5). Initial modelling suggests the anomaly has the potential of a 700 m long strike length, that is also supported by airborne VTEM data. The anomaly is directly on strike with the Brabant-McKenzie Deposit with similar conductivity values. Murchison is extremely excited to drill test the newly defined target and is optimistic it will yield positive results.

BZ21-001 (381 metres) and BZ21-002 (330 metres) both intersected volcanogenic massive sulphide (VMS) mineralization similar to what is observed at the Brabant-McKenzie Deposit (Figure 3 & 6).

The observed mineralization consists of an interval of abundant sphalerite and chalcopyrite and is located proximal to the observed off-hole borehole geophysical anomaly. The intersected mineralization is poorly conductive and only produced a minor EM response. Sphalerite is a non-conductive mineral and the intercept lacked significant pyrite or pyrrhotite which are the common cause of conductivity in massive sulphide deposits. It is interpreted that measured off-hole EM response is caused by more substantial sulphide mineralization further down dip.

Highlights:

- Hole BZ21-002 intersected 4.40% Zn, 1.33% Cu, 12.95 g/t Ag from 280.73 to 281.65 metres (0.92 m) including 0.42 m at 3.76% Zn, 2.40% Cu, 21.70 g/t Ag and 0.12 g/t Au (12.41% Zn Eq).
- Hole BZ21-001 intersected 3.59% Zn, 0.21% Cu, 5.30 g/t Ag from 327.25 to 327.54 metres (0.29 m).
- Downhole EM indicates the presence of a significant off-hole conductor down dip from the intersections.

Chief Executive Officer Jean-Charles Potvin comments:

“The Betty Zone intersections, in conjunction with the newly discovered geophysical target horizon, are an exciting development on the property. The two drill holes completed at the Betty Zone narrowly missed the primary conductor and yet still intersected mineralization – there is extremely promising potential along the conductor. The Betty Zone is less than one kilometre away and is on strike with the Brabant-McKenzie deposit; the similar geophysical characteristics adds to the potential of the area.”

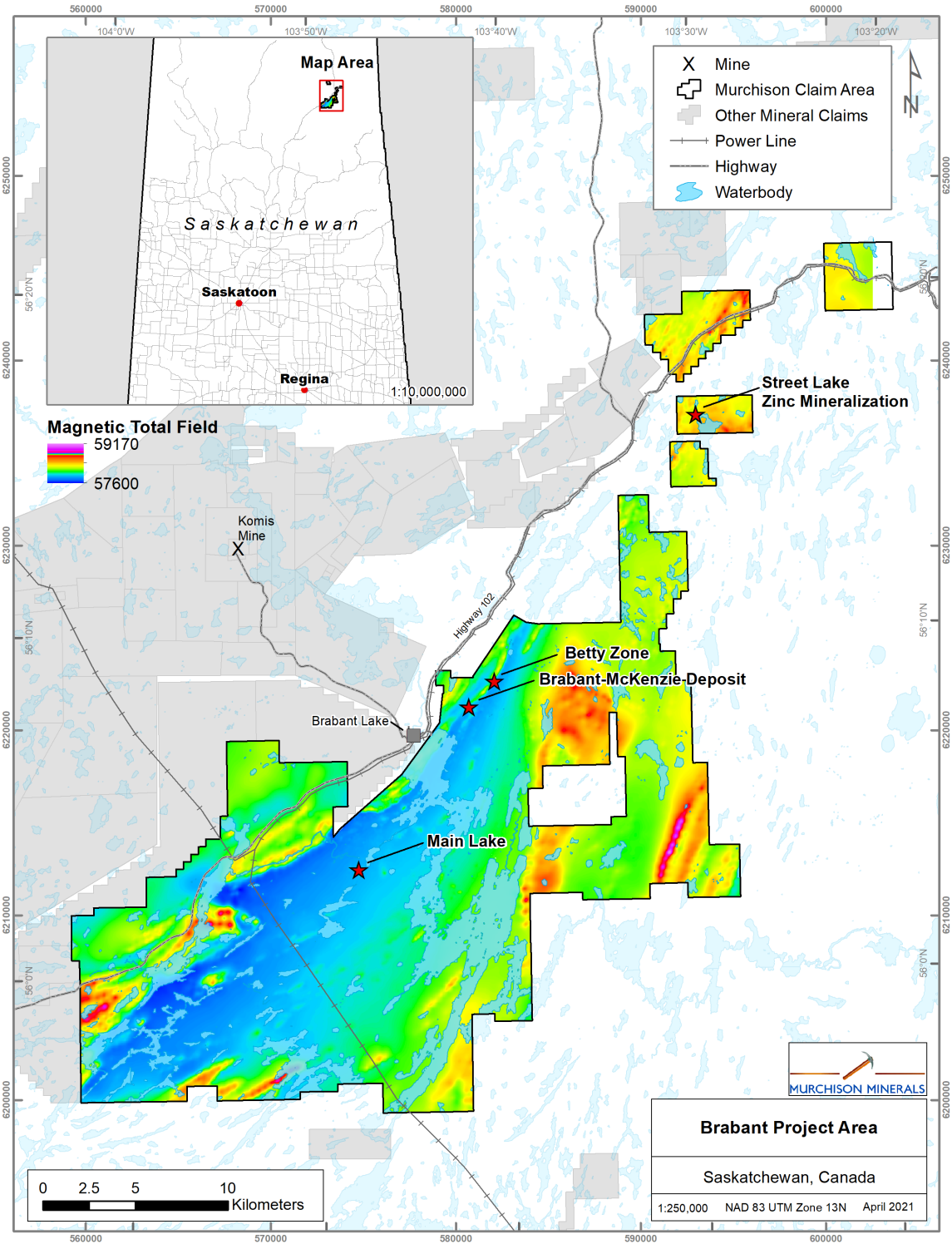

Figure 1: *Location map of the Brabant Project displaying the location of the Betty Zone labelled with a red star.*

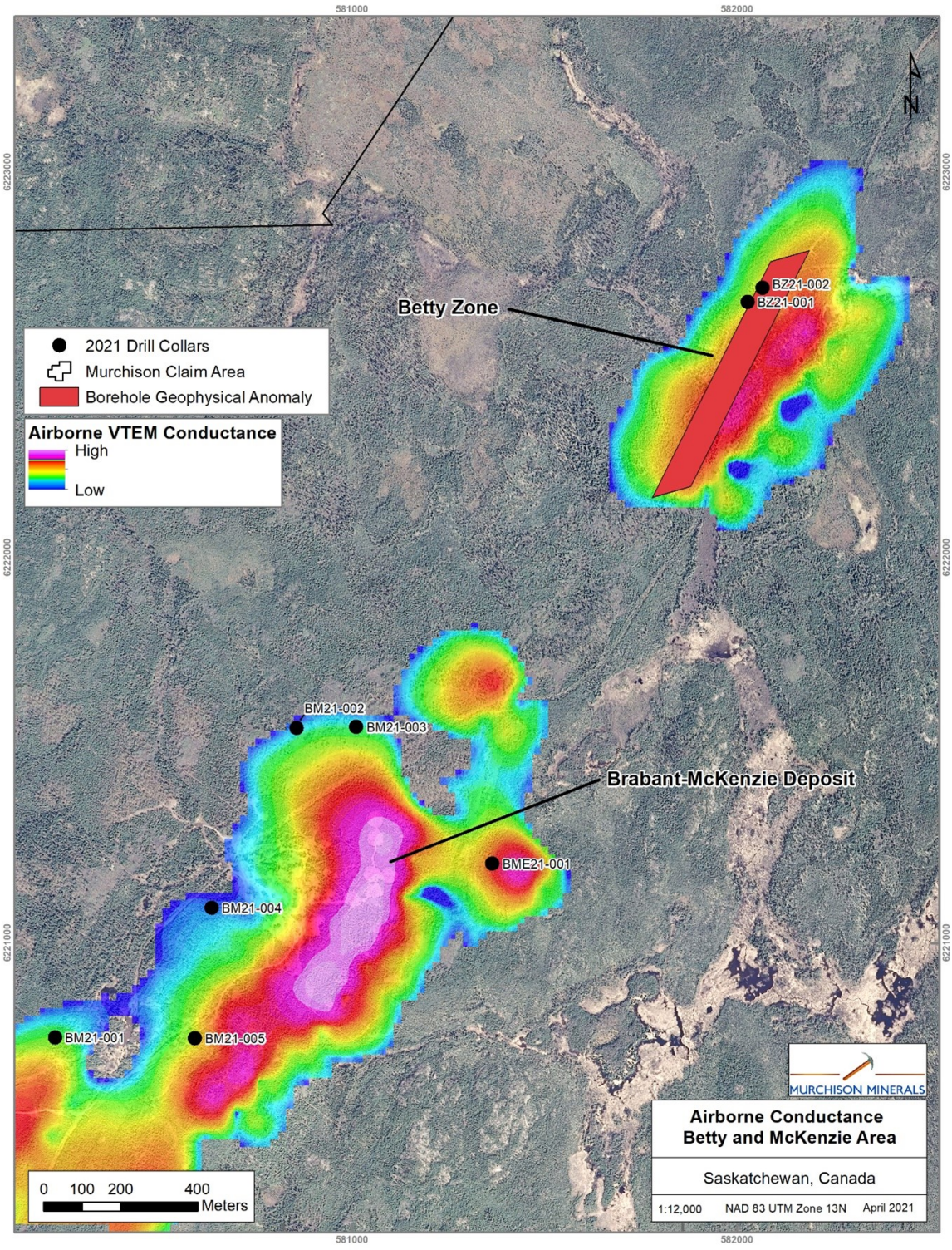

Figure 2: *Betty Geophysical Anomaly Location Map*

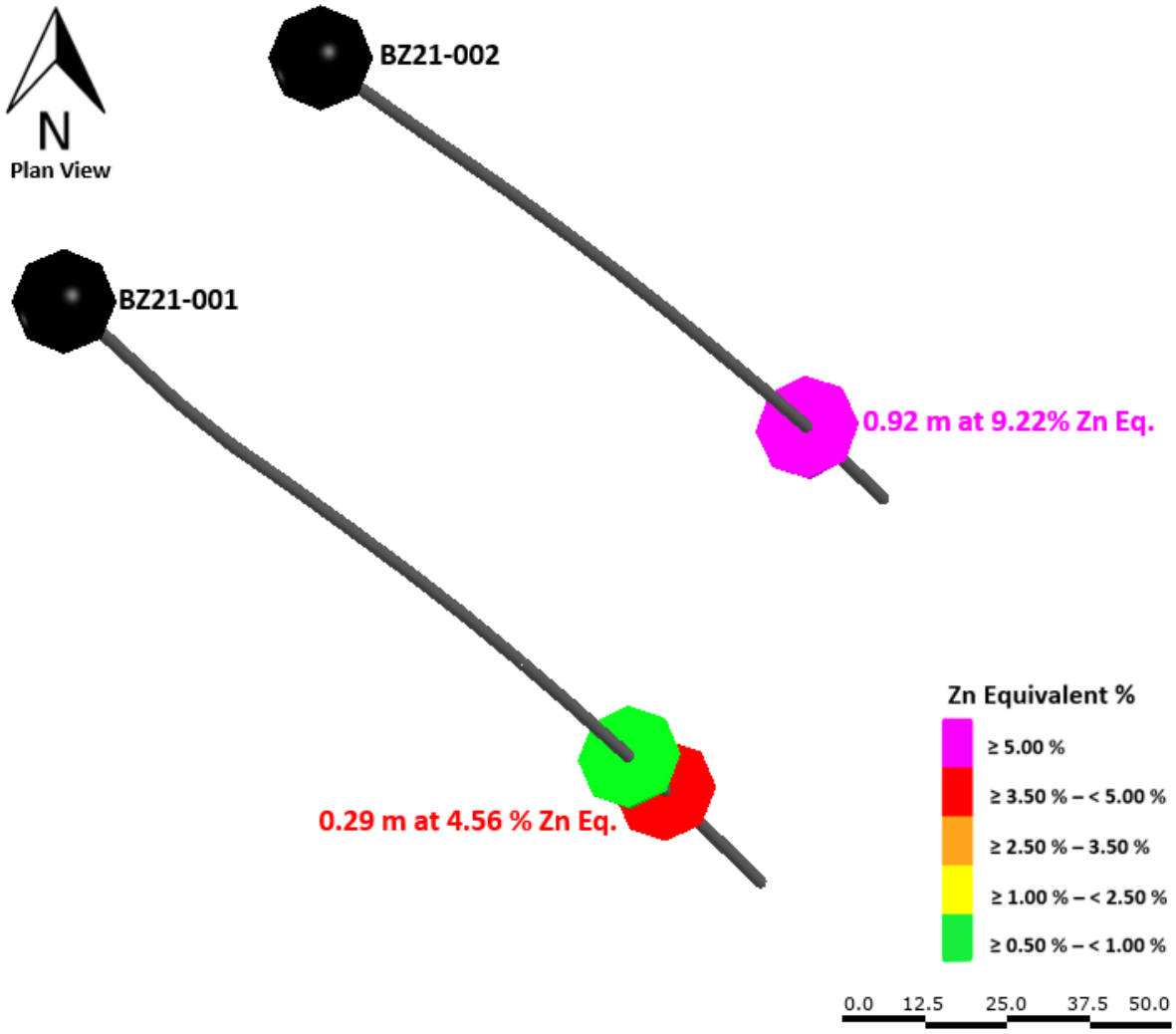

Figure 3: *Plan view of the 2021 Betty Zone drill holes, BZ21-001 and BZ21-002, displaying Zinc Equivalent percentages as derived from assays.*

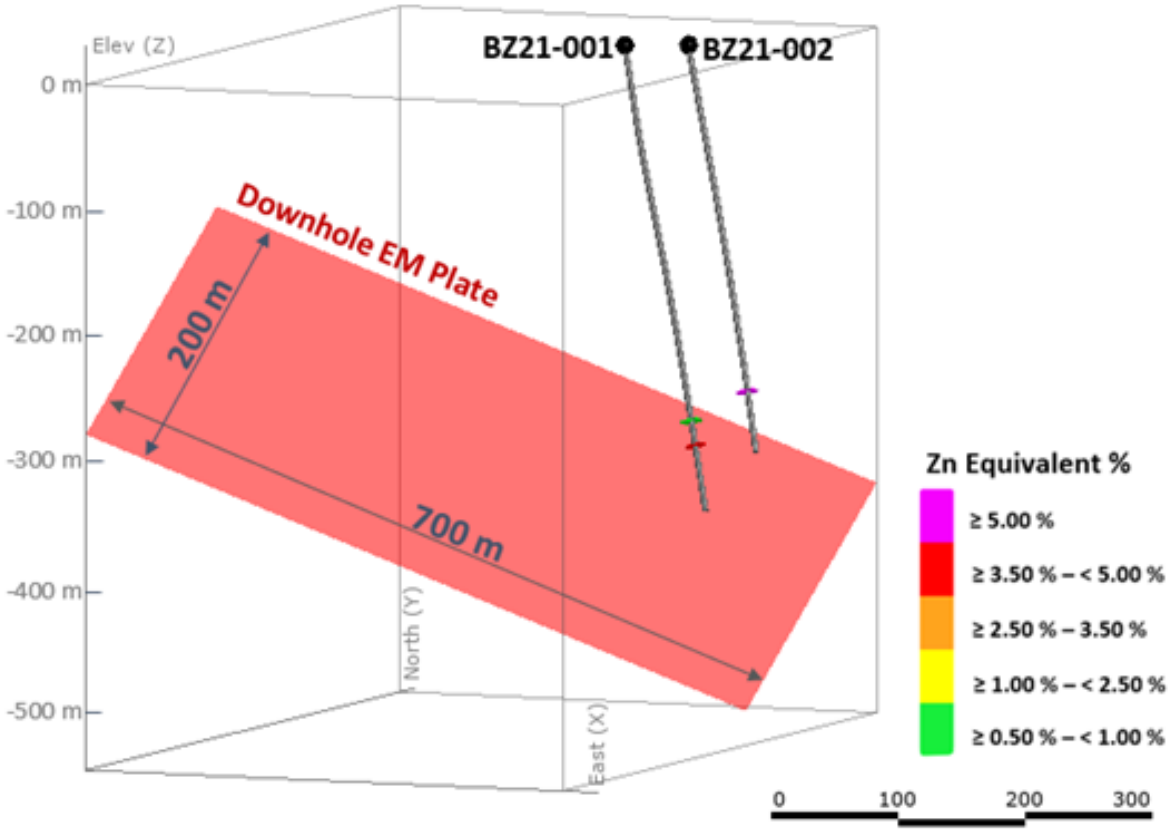

Figure 4: *Oblique view looking northwest of the 2021 Betty Zone drill holes displaying Zinc Equivalent percentages as derived from assays and the interpreted electromagnetic plate from the downhole geophysical survey.*

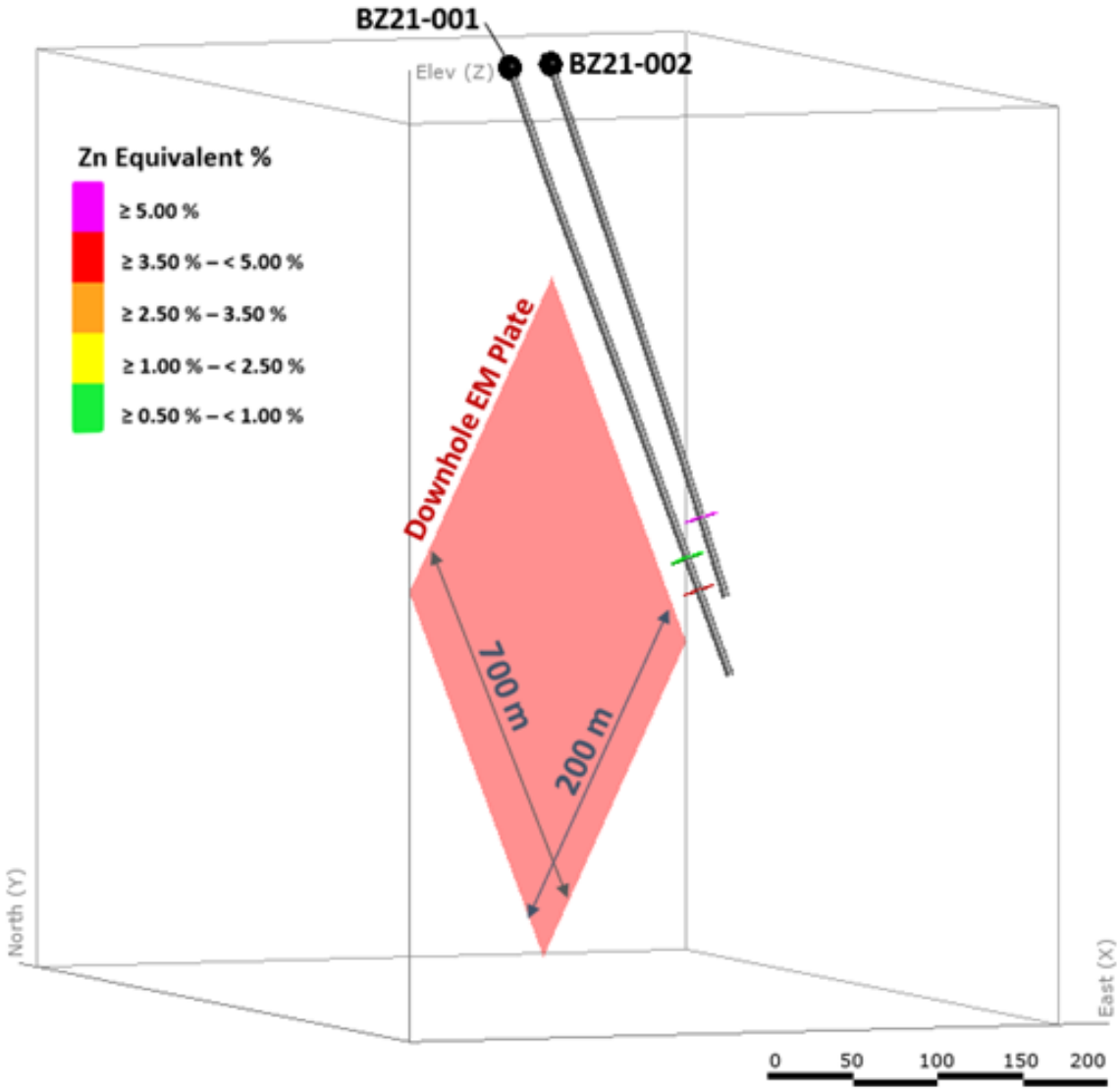

Figure 5: *Oblique view looking north-northeast of the 2021 Betty Zone drill holes displaying Zinc Equivalent percentages as derived from assays and the interpreted electromagnetic plate from the downhole geophysical survey.*

Figure 6: *Semi-massive sphalerite (zinc sulphide) mineralization observed in BZ21-002*

Results from additional drilling at the Brabant-McKenzie Deposit

Murchison has received the results from the remaining three drill holes (BM21-001, BM21-005, and BME21-001) completed at and proximal to the Brabant-McKenzie Deposit during the 2021 winter drill program (Figure 3). BM21-005 was designed to test the southern near-surface extents of the Deposit's lower domain and assess the viability of expanding the reported Inferred Mineral Resources within the upper domain; the hole successfully intersected 1.31 metres of 6.82% Zn Eq. BM21-001 was designed to test the rock mass directly south of the deposit to assess growth potential; the drill hole intersected two narrow intervals of sulphide mineralization from 222.15 to 222.92 metres and from 409.81 to 410.16 metres, indicating the area is prospective for potential resource growth (Table 1). BME21-001 was designed to test a small shallow isolated conductor directly east of the deposit. The hole intersected an interval of graphite and pyrrhotite mineralization, but no notable economic mineralization was encountered in the hole.

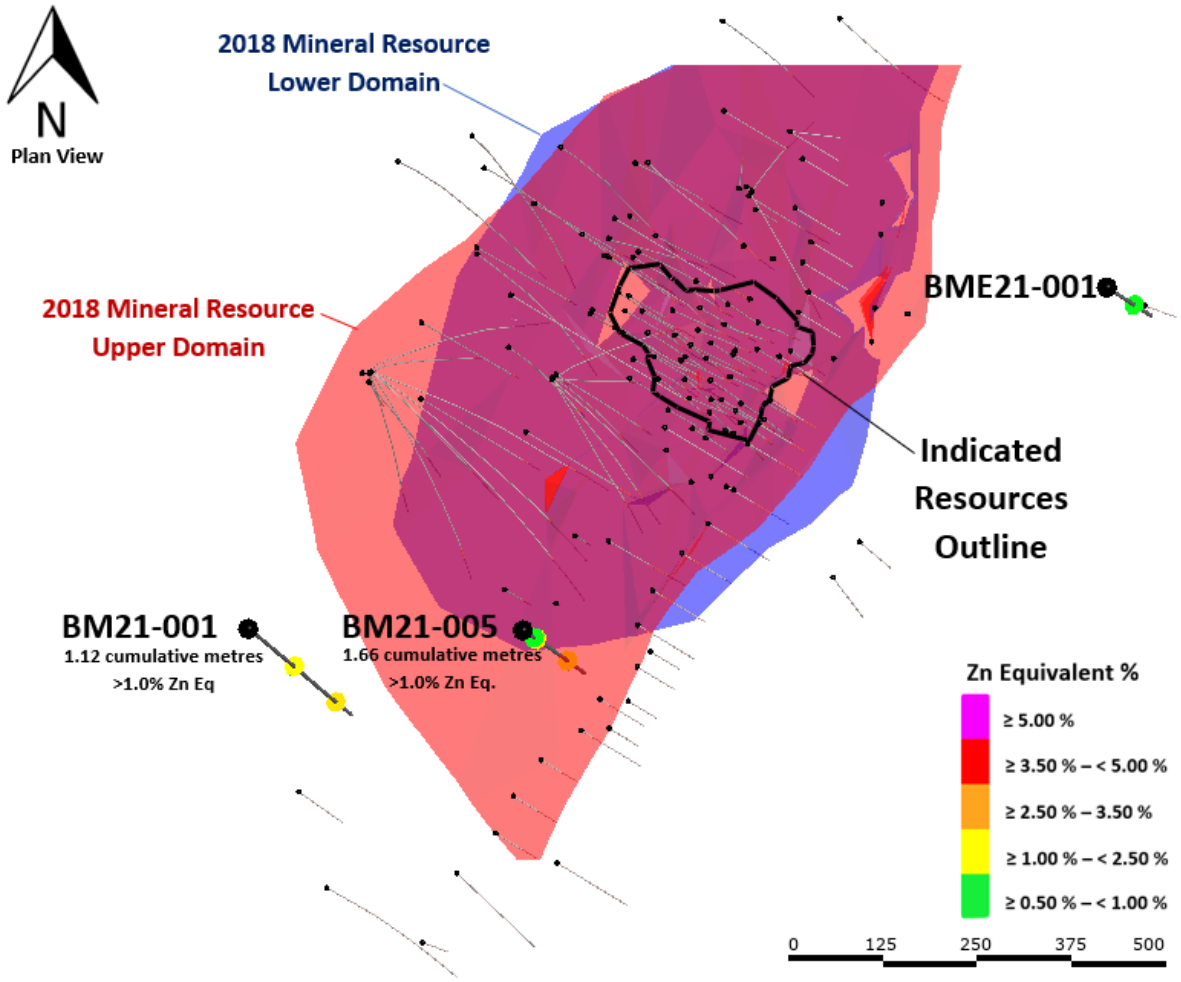

Figure 7: *Plan view of the Upper and Lower Domains from the 2018 Mineral Resource of the Brabant-McKenzie Deposit, the Indicated Mineral Resources outline, and relevant drill hole traces with BM21-001, BM21-005, and BME21-001 drill holes highlighted and displaying Zinc Equivalent percentages as derived from assays.*

Table 1: Significant Drill Intercepts from BM21-001, BM21-005, BZ21-001, and BZ21-002.

Drill Hole	From (m)	To (m)	Length (m)	Zn (%)	Cu (%)	Pb (%)	Au (g/t)	Ag (g/t)	Zn Eq* (%)
BM21-001	222.15	222.92	0.77	0.09	0.26	0.01	0.01	2.87	1.05
and	409.81	410.16	0.35	0.26	0.06	1.13	0.06	58.80	3.16
BM21-005	61.83	62.18	0.35	0.02	0.31	0.00	0.08	7.90	1.42
and	199.75	201.06	1.31	3.49	0.80	0.02	0.08	18.55	6.82
including	200.28	200.56	0.28	11.90	2.80	0.01	0.29	57.60	23.29
BZ21-001	327.25	327.54	0.29	3.59	0.21	0.02	0.05	5.30	4.56
BZ21-002	280.73	281.65	0.92	4.40	1.33	0.00	0.07	12.95	9.22
including	280.73	281.15	0.42	3.76	2.40	0.00	0.12	21.70	12.41

*Zinc Equivalent (Zn Eq) values are based on the following metal prices from April 9th, 2021: $1.29/lb Zn, $4.09/lb Cu, $0.89/lb Pb, $1,744/Oz. Au and $25.25/Oz. Ag

True widths are currently unknown. Note that BME21-001 did not intersect grades over 1.0% Zn Eq and was not composited.

Table 2: NQ Diamond Drill-hole Data

Drill Hole	UTM Zone 13N NAD 83 Easting	UTM Zone 13N NAD 83 Northing	Elevation (m)	Azimuth (° North)	Dip (°)	Length (m)
BM21-001	580230	6220755	376	124	-71	474
BM21-005	580593	6220753	376	122	-70	276
BME21-001	581365	6221206	404	125	-60	141
BZ21-001	582029	6222663	398	130	-70	381
BZ21-002	582068	6222700	396	129	-71	330

Sample Preparation and Analysis

Murchison has implemented and is adhering to a strict Quality Assurance/Quality Control program for the drilling program. NQ size core was drilled, and mineralized intervals were marked by geologists during core description. The marked intervals were sampled using a core saw, one-half is kept as a witness sample at Brabant Lake and the other assigned a unique number and placed within a plastic bag. The specific gravity of each sample was measured using the mass-in-air / mass-in-water method. Samples were shipped directly to SRC Geoanalytical Labs in Saskatoon, Saskatchewan. The samples were ground and prepared for analysis by the lab using total digestion. Analyzes were performed using ICP-OES for zinc, copper, lead, and silver. Gold was analyzed using fire assay. Every 25th sample sent to the lab was a field duplicate (quarter core), blanks and certified reference material were also submitted approximately every 25th sample.

SRC Geoanalytical Labs is accredited by Standards Council of Canada (Scope of accreditation # 537) and operates in accordance with ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories.

Qualifying Statement

The foregoing scientific and technical disclosures have been reviewed by John Shmyr, P. Geo., and Martin St-Pierre, P. Geo., 'Qualified Persons' as defined by National Instrument 43-101 (NI 43-101). Mr. Shmyr and Mr. St-Pierre are independent consultants to Murchison and the Brabant-McKenzie Project.

About the Brabant-McKenzie Project

The Brabant-McKenzie Project is located 175 kilometres northeast of La Ronge, Saskatchewan and approximately three kilometres from the community of Brabant Lake. The area is accessed year-round via provincial Highway 102 and is serviced by grid power. The project consists of one mining lease, that hosts the Brabant-McKenzie VMS Deposit, and additional mineral claims totalling 629 square kilometres, that cover approximately 57 kilometres of strike length over favourable geological horizons, multiple known mineralized showings and identified geophysical conductors.

Mineral Resource Summary for Brabant-McKenzie VMS Deposit

Category	Tonnes	Zn %	Cu %	Pb %	Au (g/t)	Ag (g/t)	Zn Eq (%)
Indicated	2,100,000	7.08	0.69	0.49	0.23	39.6	9.98
Inferred	7,600,000	4.46	0.57	0.19	0.10	18.4	6.29

The above mineral resource estimate for the Brabant-McKenzie VMS Deposit was prepared by independent qualified person ("QP") Finley Bakker, P. Geo., and has an effective date of September 4, 2018. The NI 43-101 Technical Report named Technical Report on the Resource Estimate Update for the Brabant-McKenzie Property, Brabant Lake, Saskatchewan is available on the Company's website and on SEDAR.

The Mineral Resource of the Brabant-McKenzie VMS Deposit was estimated based on metal prices of USD $1.20/lb Zn, $2.50/lb Cu, $1.00/lb Pb, $16.00/Oz. Ag, and $1,200/Oz. Au, and a USD exchange rate of $1.25. A Net Smelter Return (NSR) cut-off of $90/tonne and a 3.5% zinc equivalent based on above metal prices and an average recovery of 75% for all metals.

About Murchison Minerals Ltd. (TSXV: MUR)

Murchison is a Canadian-based exploration company focused on the exploration and development of the 100% owned Brabant-McKenzie zinc-copper-silver project in north-central Saskatchewan. The Company also has a 100% interest in the HPM nickel-copper-cobalt project in Quebec. Murchison has 108.9 million shares issued and outstanding.

Additional information about Murchison and its exploration projects can be found on the Company's website at www.murchisonminerals.com. For further information, please contact:

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Forward-Looking Information

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